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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/527,667

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Mark Werner

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EXAMINER

SLITERIS, JOSELYNN Y

ART UNIT

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3616

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/527,667	Applicant(s) WERNER ET AL.	
	Examiner JOSELYNN Y. SLITERIS	Art Unit 3616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 3/11/05.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 3/11/05 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>3/11/05</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: 82. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the cover ... rigidly secured ... and to each of said castings in claim 13 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure

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is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

3. Claims 3 and 14-26 are objected to because they are replete with informalities. Here are a few examples: in claim 3 line 2, "with a" should be --from the-- in order to be a proper Markush claim; in claim 14 lines 12 & 13, "casting" and "castings" should be --cast structure-- and --cast structures--, respectively; in claim 20, lines 11 & 12, "casting" and "castings" should be --cast structure-- and --cast structures--, respectively; in claim 21 line 2, "each said ... form" should be --each of said ... forms--; in claim 22 line 2, "each said" should be --each of said--. Appropriate correction is required.

4. Claim 12 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper

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dependent form, or rewrite the claim(s) in independent form. The limitation "wherein said center structure is a one-piece, unitary structure" in claim 12 does not constitute a further limitation because this limitation is already included in claim 11 from which claim 12 depends.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 3, 14-20, 25, and 26 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

7. In claim 3 line 1, "said metallic material" lacks proper antecedent basis in the claim.

8. In claim 14 line 2 & in claim 20 line 2, "by a method other than casting" is unclear because the claims are claiming what the invention is not, rather than what the invention is. Therefore, claims 14 and 20 are rendered indefinite.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 1-9, 11, 12, 14-20, 22, and 24-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Viduya et al. (U.S. Patent 6,408,974).

11. Regarding claims 1-6 and 22, Viduya discloses a cross member 16 as in the present invention (Figs. 1 & 2), comprising:

- an elongated, center structure 16 having a first end, a mid portion, and a second end;

- a first member 32 rigidly connected to said first end of said center structure; and
- a second member 32 rigidly connected to said second end of said center structure,

- each of said first and second members being configured and arranged to be attached to a respective motor vehicle element 12a, 12b,

- each of said first and second ends of said center structure including a flange 28 extending from said center structure and constructed and arranged to rigidify and strengthen said center structure while providing a surface that can be placed against a side surface of a respective member of said first and second members 32, 32 for attachment with said respective member of said first and second members;

- wherein said center structure is constructed as a one-piece, unitary structure;

- wherein said metallic material is selected with a group consisting of steel and aluminum;

- wherein said center structure has a U-shaped cross section;

wherein each of said members includes a flange (see annotations in Fig. 2 attached) and wherein each of said members is rigidly connected to said center structure by rigidly connecting said flange of each member to said center structure;

wherein each of said members is rigidly connected to said center structure using fasteners 31;

wherein each said flange 28 of said first and second ends of said center structure extends transversely relative to said elongated center structure.

With respect to the center structure being formed as a non-cast structure, examiner notes that the method of forming the device is not germane to the issue of patentability of the device itself. Therefore, this limitation has not been given patentable weight. However, examiner notes that the center structure of Viduya is nevertheless formed as a non-cast structure.

With respect to the first and second “castings”, examiner notes that this limitation does not serve to distinguish in an apparatus claim. Nevertheless, it is the examiner’s position that castings are extremely old and well known in the art and as such, it would have been obvious to one having ordinary skill in the art at the time the invention was made to form the members 32, 32 by casting.

12. Regarding claims 7-9, Viduya discloses the claimed invention except for the rigid connection being provided by rivets, an adhesive, and/or by welding. However, it is the examiner’s position that rigidly connecting two elements by rivets, an adhesive, and/or by welding is extremely old and well known in the art and as such, it would have been an obvious matter of design choice to use any one of the rivets, adhesive, and/or weld

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to connect two elements, since applicant has not disclosed that the rivets, adhesive, and/or weld solves any stated problem or is for any particular purpose and it appears that the invention would perform equally well with bolts and/or screws.

13. Regarding claims 11, 12, and 24, Viduya discloses a frame as in the present invention (Figs. 1 & 2), comprising:

first and second side frame members 12a, 12b; and

a cross member 16 coupled to and extending between said first and second side frame members, said cross member having

an elongated, center structure 16 having a first end, a mid portion, and a second end;

a first member 32 rigidly connected to said first end of said center structure, and

a second member 32 rigidly connected to said second end of said center structure,

said first and second members being attached to said first and second side frame members 12a, 12b, respectively, and

each of said first and second ends of said center structure including a flange 28 extending from said center structure and constructed and arranged to rigidify and strengthen said center structure while providing a surface that can be placed against a side surface of a respective member 32 of said first and second members 32, 32 for attachment with said respective member of said first and second members;

wherein each said flange of said first and second ends of said center structure extends transversely relative to said elongated center structure.

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With respect to the center structure being formed as a one-piece, unitary, non-cast structure, examiner notes that the method of forming the device is not germane to the issue of patentability of the device itself. Therefore, this limitation has not been given patentable weight. However, examiner notes that the center structure of Viduya is nevertheless formed as a one-piece, unitary, non-cast structure.

With respect to the first and second "castings", examiner notes that this limitation does not serve to distinguish in an apparatus claim. Nevertheless, it is the examiner's position that castings are extremely old and well known in the art and as such, it would have been obvious to one having ordinary skill in the art at the time the invention was made to form the members 32, 32 by casting.

14. Regarding claims 14, 16, 18, 19, and 25, as best understood, Viduya discloses a method of forming a cross member 16 as in the present invention (Figs. 1 & 2), comprising:

forming an elongated, center structure 16 by a method other than casting such that the center structure has a first end, a mid portion, and a second end;

forming first and second structures 32, 32, each structure being configured and arranged to be attached to respective motor vehicle elements 12a, 12b; and

connecting the first and second structures to the first and second ends, respectively, of the center structure to form a rigid connection between the center structure and the first and second structures;

wherein each of the first and second ends of the center structure are formed to include a flange 28 extending from the center structure and constructed and arranged to rigidify and strengthen the center structure while providing a surface that is placed against a side surface of a respective structure of the first and second structures for the connection with the respective structure of the first and second structures;

wherein the connecting of the first and second structures 32, 32 to the center structure 16 includes attaching respective flanges (see annotations in Fig. 2 attached) of the first and second structures to the center structure;

wherein the connecting is carried out by attaching fasteners 31 between each of the structures 32 and the center structure 16;

wherein the center structure is formed as a one-piece, unitary structure;

wherein connecting each of the first and second structures to the first and second ends includes moving one of the first structure and the first end in a fore-aft/up-down slip plane prior to forming a rigid connection to assure dimensional accuracy.

While Viduya does not specifically disclose forming the first and second structures by casting, it is the examiner's position that casting is extremely old and well known in the art and as such, it would have been obvious to one having ordinary skill in the art at the time the invention was made to form the structures 32, 32 by casting.

15. Regarding claim 15, as best understood, Viduya discloses the claimed invention except for the center structure being formed by stamping. However, it is the examiner's position that stamping is extremely old and well known in the art and as such, it would

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have been obvious to one having ordinary skill in the art at the time the invention was made to form the center structure by stamping.

16. Regarding claim 17, as best understood, Viduya discloses the claimed invention except for the connecting being carried out by welding. However, it is the examiner's position that connecting by welding is extremely old and well known in the art and as such, it would have been an obvious matter of design choice to connect by welding, since applicant has not disclosed that welding solves any stated problem or is for any particular purpose and it appears that the invention would perform equally well with bolts and/or screws.

17. Regarding claims 20 and 26, as best understood, Viduya discloses a method of forming a motor vehicle frame as in the present invention (Figs. 1 & 2), comprising:

- forming an elongated, center structure 16 by a method other than casting such that the center structure has a first end, a mid portion, and a second end;

- forming first and second structures 32, 32, each structure being configured and arranged to be attached to respective motor vehicle elements 12a, 12b;

- connecting the first and second structures to the first and second ends, respectively, of the center structure to form a rigid connection between the center structure and the first and second structures, wherein each of the first and second ends of the center structure are formed to include a flange 28 extending from the center structure and constructed and arranged to rigidify and strengthen the center structure while providing a surface that is placed against a side surface of a respective structure of the first and second structures for the

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connection with the respective structure of the first and second structures; and

connecting the first structure 32 to a first motor vehicle frame member 12a; and

connecting the second structure 32 to a second motor vehicle frame member 12b;

wherein connecting each of the first and second structures to the first and second ends includes moving one of the first structure and the first end in a fore-aft/up-down slip plane prior to forming a rigid connection to assure dimensional accuracy.

While Viduya does not specifically disclose forming the first and second structures by casting, it is the examiner's position that casting is extremely old and well known in the art and as such, it would have been obvious to one having ordinary skill in the art at the time the invention was made to form the structures 32, 32 by casting.

18. Claims 10 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Viduya et al. (U.S. Patent 6,408,974) in view of Dostert et al. (U.S. Patent 5,997,038).

19. Regarding claims 10 and 13, Viduya discloses the claimed invention except for a cover mounted beneath and rigidly secured to the center structure to close the U-shaped cross-section of the center structure. Dostert discloses that it is known in the art to provide a cover 170 mounted beneath and rigidly secured to a structure 22 to close the U-shaped cross-section of the structure. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the center structure of Viduya with the cover of Dostert, in order to close the U-shaped cross-section of the center structure.

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20. Claims 21 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Viduya et al. (U.S. Patent 6,408,974) in view of Huang et al. (U.S. Patent 6,783,157).

21. Regarding claims 21 and 23, Viduya discloses the claimed invention except for each said flange of said first and second ends of said center structure forming part of a single, continuous flange that extends along the entire perimeter of said center structure. Huang (Figs. 1-4) discloses that it is known in the art to provide a flange 54 that extends along most of the perimeter of the cross member 20, including along the entire central portion 52 of the cross member (Fig. 4). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the mid portion of the cross member of Viduya with the flange of Huang, in order to help rigidify and strengthen the center structure. As a result, the flange would extend along the entire perimeter of the center structure 16 of Viduya and each said flange 28 of the first and second ends of the center structure 16 would form part of a single, continuous flange that extends along the entire perimeter of the center structure.

Conclusion

22. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

23. Any inquiry concerning this communication or earlier communications from the examiner should be directed to JOSELYNN Y. SLITERIS whose telephone number is

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(571)272-6675. The examiner can normally be reached on Monday, Tuesday & Thursday 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lesley D. Morris can be reached on 571-272-6651. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Joselynn Y. Sliteris/
Examiner, Art Unit 3616
3/28/08

/Christopher Bottorff/
Primary Examiner, Art Unit 3618